A GUMBOOT KIDS CURRICULUM

AS SEEN ON CBC Kids

LEARN ABOUT SUNFLOWERS

AGES 4–8

curio.ca

GUMBOOTKIDS.COM

This teacher guide supports the following Gumboot Kids episodes about sunflowers found on CBC Curio:

- **The Case of The Growing Birdfeeder** (Scout & the Gumboot Kids)
- **Bird Cookies** (Daisy & the Gumboot Kids)
- **Come on and Shine** (Jessie & the Gumboot Kids)

Please refer to **General Considerations for Educators** for more insights.

IN THIS EPISODE, *CASE OF THE GROWING BIRD FEEDER*, SCOUT DISCOVERS THAT SOME BIRDS EAT SUNFLOWER SEEDS.

Vocabulary: sunshine, seeds, birds, sunflowers, ray florets, disk florets, leaves, stalk, roots, gratitude

POST VIEWING QUESTIONS/ PROMPTS

After viewing *The Case of The Growing Birdfeeder* have students think about what they have seen by responding to some, or all, of the following prompts. Children could respond in a variety of ways either individually or as a large group. For example, children could respond by sharing their ideas verbally with a friend, representing their thinking using loose parts, drawing a picture, recording a video on a tablet, or creating a brief written response in their field notes.

- What did you learn about sunflowers?
- What clues did Scout give to the Gumboot Kids?
- What were the birds eating from the sunflowers?
- Scout explained that the head of the sunflower moves to face the sun. Why do you think this happens?
- Sunflowers need water to grow, but how do you think they "drink" the water?
- Have you ever seen a sunflower in nature? Where did you see it? Was it in a garden or in a field with other sunflowers? How tall was it? What else have you noticed about sunflowers?
- What are you still wondering about sunflowers?

"Keep your face to the sunshine and you cannot see the shadow. It's what the sunflowers do." **—HELEN KELLER**

LET'S GO OUTSIDE!

Outdoor Learning

In this activity children head outdoors for some imaginative play and to use their senses to mindfully observe their surroundings, including birds and their habitat.

Allow the children to move their bodies for awhile. You can encourage them to imagine they are birds flying and swooping around in an open, safe space.

- Spread your wings like a bird
- Move gracefully around the space observing birds around you.
- What kind of bird are you?
- Now try flapping your wings faster... and now slower.

Bring the group together to sit or stand in a circle. Have the children tune in to their senses. This will help them settle down and get ready to be nature detectives. Ask them to sit comfortably and take some slow, deep breaths. You can refer to the General Considerations for breathing exercises. Prompt them to pay attention to their senses. Take your time with the prompts to allow them to fully and mindfully tune in to each sensation.

- Notice the temperature of the air as you breathe.
- Notice how the air smells.
- Now focus on the sounds around you. Notice the different sounds. Focus on sounds in the distance. Focus on sounds that are near. What do you hear?
- How do you feel in this moment? Can you name an emotion that you are feeling?

If the sun is shining, ask the children to keep their eyes closed and turn slowly to face the sun, just like a sunflower. They can imagine that they are sunflowers and the sunshine is giving them energy. Sunflowers—and all plants—draw energy from the sun, the air and the soil to help them grow.

After a few moments of calm, quiet observation and you feel the time is right, ask the children to slowly open their eyes. They may want to stretch and stand up.

Now it's time to go on a nature discovery walk and look for some birds! Use these provocations to guide the children's thinking as you seek out birds and their habitat:

- Besides seeing one, how might you be able to tell if there is a bird close by?
- Do you notice any birds flying? Do you notice any birds in the trees?
- Can you see or think of anywhere nearby where birds might find food to eat?
- Where might birds live?
- What might birds eat besides sunflowers? (other seeds, insects, grains and grasses)
- If it's late summer or early autumn perhaps you'll be lucky enough to see some sunflowers

As you explore these ideas, allow the children to touch the trees and look up in their branches. When

EXTENSIONS: GROWING SUNFLOWERS

Sunflowers are easy to grow so they're ideal for children and beginner gardeners. Depending on the availability of garden space, this activity can be done inside in pots our outdoors right in the ground. There are many excellent online resources with simple step by step instructions for growing sunflowers. This is a wonderful longer-term project in which children can return periodically to track the sunflowers growth, draw and jot down their observations and reflections in their field notes.

discussing what birds might like to eat, let the children look around grassy areas and gardens. Let their curiosity guide the exploration.

HANDS-ON LEARNING

Nature Station

In this activity children will learn the various parts of a sunflower and make observations in their field notes. Either inside or outside set up a nature station: place a number of sunflowers on a table with some tools to help the children make observations and record them in their field notes (with sketches and/or brief descriptions).

You can find sunflowers at a farm or in a garden in the late summer or early autumn. Otherwise, they're typically available from a garden store or florist. If possible, choose a number of sunflowers at different stages of development. Younger sunflowers will not have any seeds; in more mature sunflowers the ray florets will have turned into sunflower seeds. You can also spread out some sunflower seeds for the children to touch, open up and taste.

Some useful tools include:

- Field notes
- Magnifying glasses
- Ruler
- Tablet for taking photos
- Coloured paper
- Scissors
- Regular and coloured pencils
- Glue

Encourage the children to observe the sunflowers using their sense of touch, sight and smell. They can record their observations in their field notes by drawing what they see and writing a few key words to describe their observations. What do you notice about how the sunflowers look? What colours do you see? What textures do you feel? Do the sunflowers have a scent?

If you are unable to find sunflowers, place some sunflower seeds out on the table and have the children draw and note their observations in their field notes. You could have them cut simple shapes out of coloured paper—petals, disc florets,

seeds, stalks, leaves and roots—to create their own sunflower art. You could print out Scout's field notes (included in this curriculum package) for the children to reference. For inspiration, show the children images of fields of sunflowers and famous works of art, like Van Gogh's Sunflower Series.

MINDFUL MOMENT

Gratitude

To begin the activity remind the children how in *The Case of The Growing Bird Feeder* Scout expressed gratitude for the Sun and the life force it gives to the sunflowers. Depending on the age of the children you are working with you may wish to do a bit of sharing around what the word gratitude means and differentiating between feeling thankful for tangible things versus feeling thankful for experiences and relationships. Exploring feelings of thankfulness around experiences and relationships can help foster a greater sense of well-being. Try asking about how they feel while they reflect on things they are grateful for. Do they feel happy? Cozy? Calm? Excited?

If possible, go outside, ideally on a sunny day, and find a warm and bright place where the children can sit. Have all the children sit in a circle, close their eyes (if they feel comfortable doing so) or shield their eyes with their hands and turn their face to the sun (just like a sunflower). Guide the children through a short thinking exercise to help them brainstorm what they are grateful for in their life. Feel free to change the script to make it your own and to fit the context of your learning environment, but it might go something like this:

"Take a deep breath in and out, in and out (do slow steady breathing with the children as you say this). Feel the warmth of the sun on your face. Isn't it wonderful to be able to be outside on this sunny day enjoying the sun's glow. I want you to think about some other things that you appreciate about today. Maybe you are thankful for a special treat in your lunch today, or the way a friend helped you when you found something difficult or perhaps you are thankful because your grandparents are coming to visit soon. Now think about something else you are grateful for. Something bigger than just today. For example, I am grateful for (share something you are grateful for) and I am grateful for (share something else you are grateful for). We are going to be quiet now for a minute and I want you to try and think of at least three things you are grateful for in your life. They can be big things or little things but try to make them meaningful to you"

Once individual thinking time is complete you could invite children to share their thinking if they want. Observe the children and notice the

children who may need further thinking time or adult prompting. When they are ready invite each child to trace their handprint on yellow paper five times and cut it out. On each handprint have the children draw or write something they are grateful for in their life. Alternatively, you could have the children complete one or two "hands" at school on the first day and then one additional "hand" each morning for the next three days. This could lead to a morning meeting around gratitude for each day that week to reinforce the concept and give children more time to think about what they are grateful for. Once complete use the yellow handprints to make a field of gratitude sunflowers to share visually in your classroom or with the wider school community. For an added individual and artistic touch place a photo of each child's face in the center of the sunflower. There could even be empty sunflowers with an additional pocket of yellow hand cut-outs and pens left outside the classroom to encourage other family or school community members to add their own thinking to the gratitude sunflowers.

FIELD NOTE INSPIRATION

- Drawings, perhaps with labels, of the sunflowers that the children observe and/or that the class is growing from seed
- Words or simple sentences describing the children's observations of sunflowers
- A gratitude list—what are you thankful for (relationships and experiences)?

> **"THE EARTH LAUGHS IN FLOWERS"**
>
> **—RALPH WALDO EMERSON, AMERICAN PHILOSOPHER AND POET**

Anatomy of a Sunflower

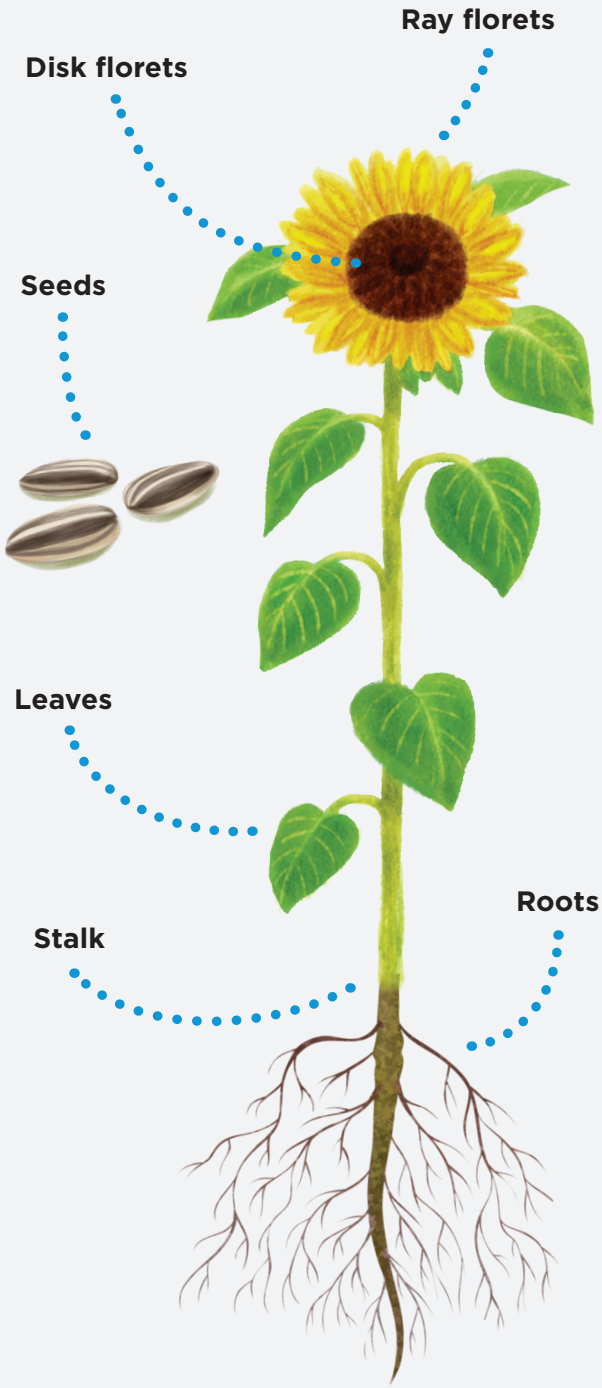
Ray florets:
Each yellow petal around the sunflower head is a separate flower.

Disk florets & Seeds:
The dark centre is also made up of thousands of brown flowers which produce seeds.

Leaves:
The leaves, stem, and early flowering head move to face the sun throughout the day. This is called *heliotropism*.

Stalk:
Sunflowers can grow up to three metres tall!

Roots:
The roots absorb water and minerals, and send nutrients up to the flower.



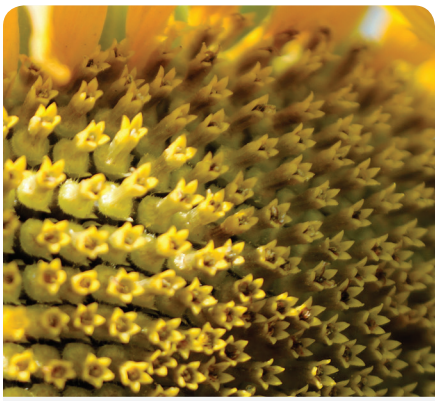
Gumboot Kids' Field Notes

The Growing Bird Feeder curio.ca/en/video/the-case-of-the-growing-bird-feeder-21416

There are almost 50 different species of sunflower.

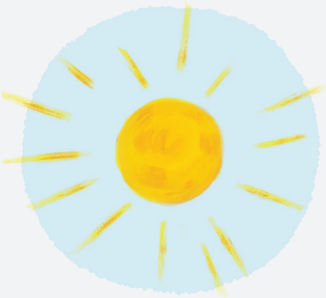
Almost every part of a sunflower is edible. It is a source of food for animals and people alike.

Sunflowers and daisies are both in the Asteraceae family.



A sunflower may look like one big flower, but it's actually hundreds, if not thousands of tiny flowers growing together.

People have been growing sunflowers for thousands of years because they have so many uses.



Sunflowers don't just look like the sun, they need a lot of it. They are heliotropic plants, which means they actually move so that they are always facing toward the sun.

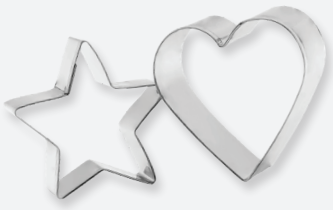
Gumboot Kids' Nature Craft

Bird Cookies curio.ca/en/video/bird-cookies-21445

This Nature Craft is a fun and tactile way to make a bird feeder for the school grounds, a park or backyard.

STEP 1

Collect some cookie cutters from your kitchen. Choose fun shapes like stars and hearts.



STEP 2

Mix 2 cups of birdseed and unflavoured gelatin with a cup of warm water in a large mixing bowl. Place your cookie cutters on a flat surface and fill them with the birdseed mixture. Use your hands to press it down to form your cookie. Use a pencil to make a hole in each cookie so you can hang them up once they're dry.

STEP 3

Let your cookies dry completely and then push them out of the cookie cutter.

Tie some string through the hole.

Now hang your creation on a branch for your bird friends to enjoy!

Come on and Shine

Music by Jessie Farrell

You can be my sunflower
I'll be your sunshine
We'll rise and shine together
Meet you halfway
Up in the sky

Come on and shine when you're feeling low
Come on and shine when you're all alone
Come on and shine when you feel afraid
Just like the sun shines

Come on and shine when you're feeling low
Come on and shine when you're all alone
Come on and shine cause it's just your time

Just like the sun shines
Just like the sun shines

You can be my sunflower
I'll be your sunshine

Come on and shine when you're feeling low
Come on and shine when you're all alone
Come on and shine when you feel afraid
Just like the sunshine

Come on and shine when you're feeling low
Come on and shine when you're all alone
Come on and shine cause it's just your time

Just like the sun shines
Just like the sun shines
Just like the sun shines

AVAILABLE ON:
SPARKLE AND SHINE

gumbootkids.com/shop

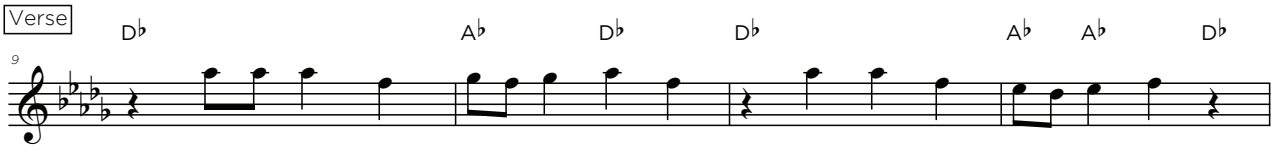
Come on and Shine (Sunflowers)

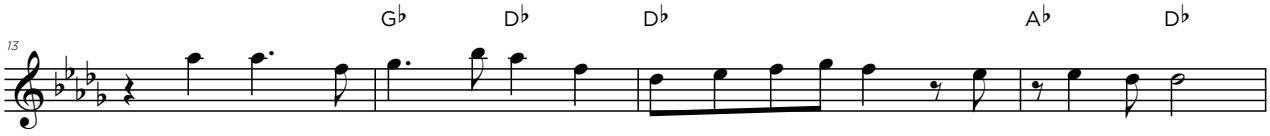
As featured on *The Gumboot Kids*
Written by Jessie Farrell
Imagine Create Music Inc. ©

♩ = 170

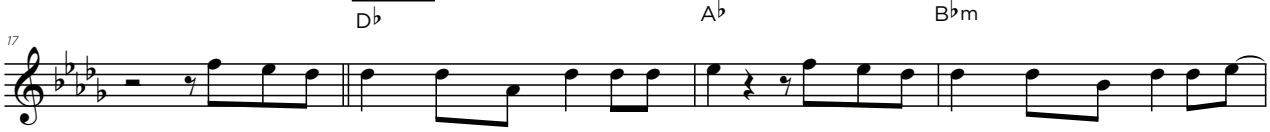
Intro

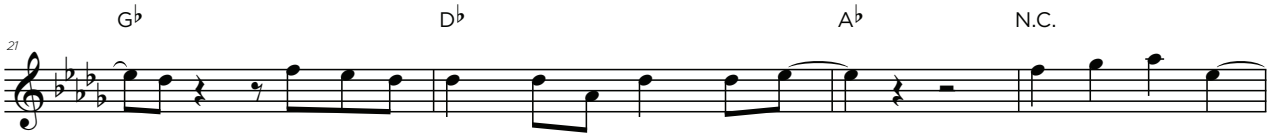
Verse

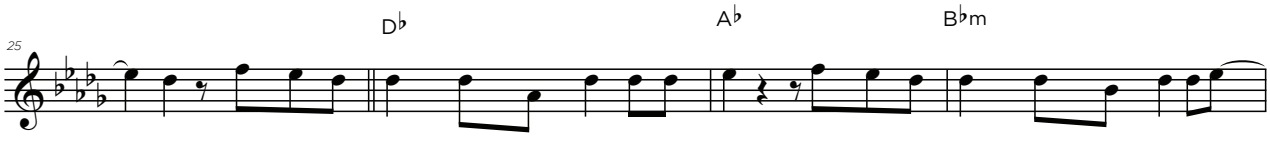




𝄋 Chorus

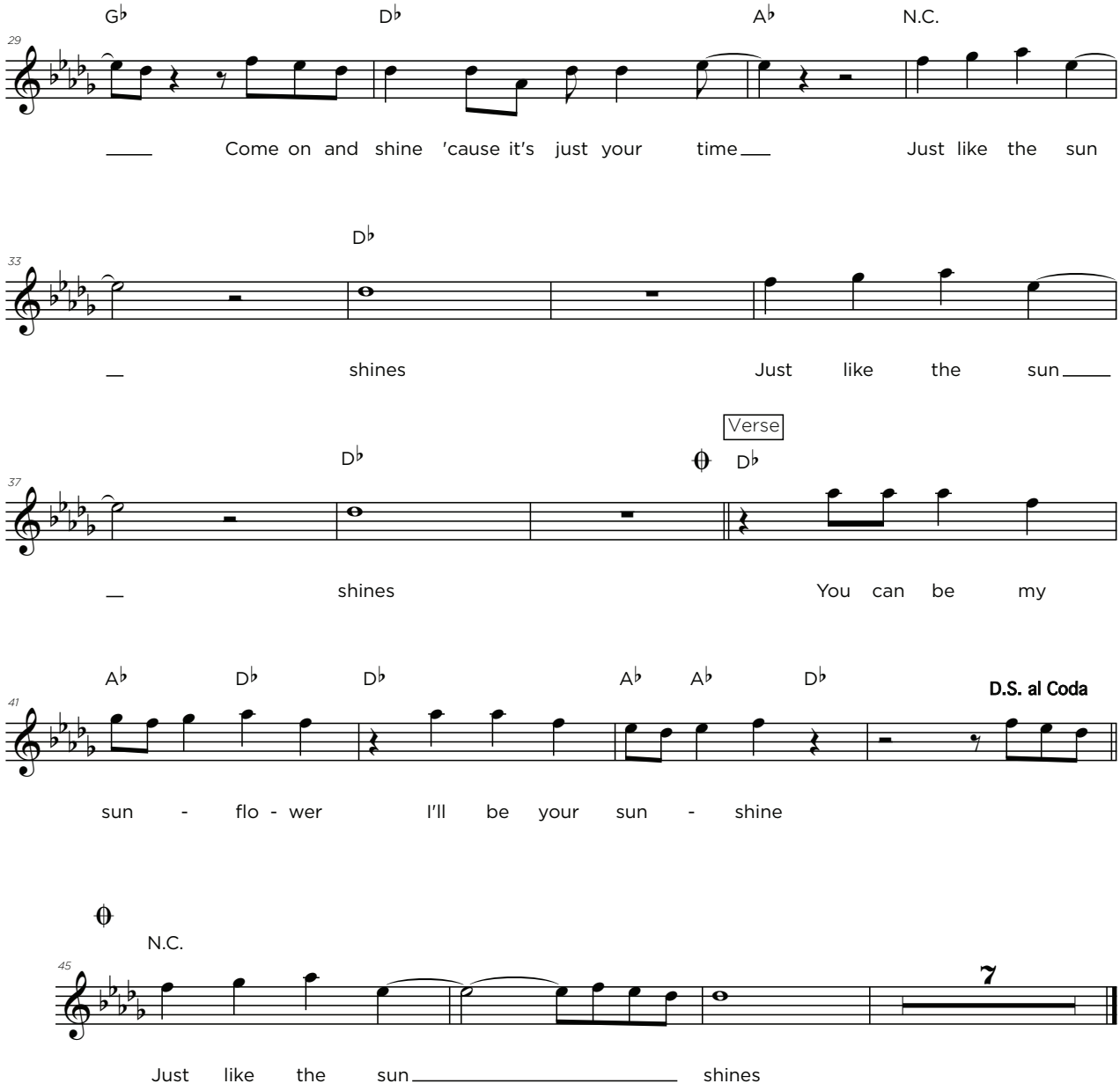






Come on and Shine (Sunflowers)

As featured on *The Gumboot Kids*
Written by Jessie Farrell
Imagine Create Music Inc. ©



GUMBOOT KIDS TEAM

Created by Eric Hogan & Tara Hungerford

Mindfulness: Molly Stewart Lawlor, Ph.D
Zoologist: Michelle Tseng, Ph.D
Botanist: Loren Rieseberg, Ph.D
Teacher: Sarah Beairsto, MEd

Developed for Television with Cathy Moss
Head of Production Tracey Mack
Music By Jessie Farrell
Illustrations by Kate Jeong
Photography by Michelle Tseng, Annick Violet
Scout & Daisy Animation Deanna Patridge-David
Additional Animation by Affolter Brothers,
Lynn Dana Wilton

We are passionate about connecting children with nature. We also love how nature teaches and reminds us to be mindful.

We would love to hear from you! Let us know if you have any feedback. We hope you stay connected as we continue to add new curriculums to the Gumboot Kids collection.

Follow us at **@gumbootkids**
Share the joy and wonder #**gumbootkids**

gumbootkids.com

Additional Resources

The Case of The Growing Birdfeeder

By Eric Hogan & Tara Hungerford

Sparkle and Shine

By Jessie Farrell

VIEW NOW!

FOR MORE INSPIRATION ON SUNFLOWERS:
Visit our Pinterest board at pinterest.ca/gumbootkids/learn-about-sunflowers